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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/527,208

11/07/2005

Peter Andrich

HKH-15PCT

9638

40570 7590 03/16/2010
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EXAMINER

WOOD, ELLEN S

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

03/16/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/527,208	Applicant(s) ANDRICH ET AL.	
	Examiner ELLEN S. WOOD	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7, 8 and 10-25 is/are pending in the application.
- 4a) Of the above claim(s) 11-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7, 8 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 and 5, 7, 8 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Darras et al. (US 2002/0176947, hereinafter “Darras”).

In regards to claim 1, Darras discloses containers, such as bottles and flasks [0001]. Thus, a beverage container. The container is formed from a polymer material, such as a polyolefin or a polyester [0023]. The polymer material consists of a single-layer material of PET [0023]. The polymer material has constituents that can migrate into the interior of the container, thus a internal coating is used to prevent the migration [0024]. The internal coating is applied by plasma deposition [0026]. The polymer material is a thermoplastic material that is already molded [0016]. Darras discloses that without the internal coating the polymer material is left in contact with the liquid and does not offer any protection against the disadvantages incurred by this contact: possibility of certain constituents migrating from the polymer into the liquid, possibility of a chemical reaction between the polymer and liquid, acetaldehyde being transferred into the liquid, etc., all factors which are likely to give rise to organoleptic problems [0009].

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Thus, the internal coating controls the migration of constituents into the liquid to prevent harmful constituents from entering the contents of the container. The surface coating is applied as a plasma coating [0040]. The surface coating may be a network of silicon stabilized by oxygen (SiOx) [0020]. The PET container wall is made of polymer material which has been pre-treated to allow a stronger adhesion of the plasma material and allow the deformation of the container without the two layers coming unstuck [0078]. Thus, the surface coating is applied to the surface with the use of an adhesion promoter.

In regards to claim 5, Darras discloses that the surface coating is applied as a plasma coating [0040].

In regards to claim 6, Darras discloses that the surface coating may be a network of silicon stabilized by oxygen (SiOx) [0020].

In regards to claim 7, Darras discloses that the container may be in the shape of a bottle (abstract).

In regards to claims 8, Darras discloses that the polymer material consists of a single-layer material of PET [0023].

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Darras et al. (US 2002/0176947, hereinafter "Darras") in view of Namamachi (US 6,355,738).

Darras discloses the invention essentially as claimed, with the exception of the thermoplastic material consisting of a recycled material, the acetaldehyde content, and the plastic containing a catalyst as one of its constituents.

Nakamachi discloses a polyester that is widely used for containers such as bottles that has excellent gas barrier properties, transparency, and heat resistance (col. 1 lines 5-10). The polyester may have recycled PET blended within (col. 5 lines 46-47). The acetaldehyde content is 20 ppm (col. 5 lines 38-40). The plastic contains a catalyst that could be considered a constituent (col. 7 lines 33-40).

It would be obvious to one of ordinary skill in the art to use the polyester as disclosed by Nakamachi in the formation of the bottle of Darras. The addition of the plasma coating disclosed by Darras on the polyester bottle would considerably reduce the amount of acetaldehyde being released into the container contents [0024], thus allowing for enhanced barrier protection and extended shelf life [0009].

Response to Arguments

5. Applicant's arguments filed 01/14/2010 have been fully considered but they are not persuasive.

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6. Claims 6 and 9 have been cancelled.

7. The applicant argues that the barrier layer of Darras contains carbon. Thus, the barrier layer has a brown color.

In response, claim 1 states that the surface coating is applied to the surface and has a general formula SiO_x . Darras discloses a carbon material that is adhered to the surface of the container that has a general formula of SiO_x [0020]. Claim 1 does not limit the scope of the claim to just a coating comprising the general formula SiO_x . The color of the barrier coating is irrelevant to the claim subject matter. Darras discloses that the PET container wall is made of polymer material which has been pre-treated to allow a stronger adhesion of the plasma material and allow the deformation of the container without the two layers coming unstuck [0078]. Thus, the surface coating is applied to the surface with the use of an adhesion promoter.

8. The applicant argues that Darras does not teach that the container uses a polymer that has constituents that are transferable to the liquid in the container, which constituents are in a quantity that is greater than permissible for packaging the product.

In response, Darras discloses that without the internal coating the polymer material is left in contact with the liquid and does not offer any protection against the disadvantages incurred by this contact: possibility of certain constituents migrating from the polymer into the liquid, possibility of a chemical reaction between the polymer and liquid, acetaldehyde being transferred into the liquid, etc., all factors which are likely to give rise to organoleptic problems [0009]. Thus, the internal coating controls the

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migration of constituents into the liquid to prevent harmful constituents from entering the contents of the container. Without the internal coating the polymer constituents would migrate into the liquid, thus giving rise to organoleptic problems which would make the package impermissible. Darras uses the internal coating to prevent harmful materials migrating out of the plastic material into the packaged beverage.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELLEN S. WOOD whose telephone number is (571)270-3450. The examiner can normally be reached on M-F 730-5 with every other Friday off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571)272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rena L. Dye/
Supervisory Patent Examiner, Art Unit 1794